

United States of America
Department of Transportation -- Federal Aviation Administration
Supplemental Type Certificate

Number SH4310NM

This certificate issued to

Texas Aviation Services
3901 North Main St., Hanger 2 South
Fort Worth, TX 75052

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 29 of the Federal Aviation Regulations.

Effective February 1, 1965, plus Amendments 29-1 through 29-16, Equivalent Safety Findings as listed on TCDS No. H13EU and FAR 21.29.

Original Product -- Type Certificate Number: H13EU

Make: Messerschmitt-Bolkow-Blohm GMBH

Model: MBB-BK 117 A-1, A-3; A-4 and B-1

Description of Type Design Change:

Installation of the Model 2110 Vibration Isolation Mount with a FLIR 2000 Series Infrared Imager or a Spectrolab SX-16 Nightsun in accordance with FLIR Systems, Inc. Drawing List No. M-2110, Revision A, dated August 26, 1988, for the FLIR Imager, FLIR Systems, Inc. Drawing List No. M-2110, dated April 12, 1988, for the Nightsun, or later FAA approved revision. (See Continuation Sheet 3 of 3.)

Limitations and Conditions: Approval of this change in type design applies to the above model rotorcraft only. This approval should not be extended to other rotorcraft of this model on which other previously approved modification are incorporated unless it is determined that the interrelationship between this change and any other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that rotorcraft. A copy of this Certificate, Continuation Sheet, and FAA approved Flight Manual Supplement for the Spectrolab SX-16 Nightsun or the FLIR 2000 Series Imager must be maintained as part of the permanent records for the modified rotorcraft. (See Continuation Sheet 3 of 3.)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: January 27, 1988

Date reissued: 5/27/03; 9/12/03;
March 10, 2010

Date of issuance: March 08, 2010

Date amended: 6/13/88; 8/26/88;
May 27, 2003



By direction of the Administrator

(Signature)
Lance T. Gant, Manager
Rotorcraft Certification Office
Southwest Region

United States of America
Department of Transportation -- Federal Aviation Administration

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Number SH4310NM
(Continuation Sheet)

Texas Aviation Services
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Reissued: 5/27/03; 9/12/03; March 10, 2010
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Description of Type Design Change (cont'd)

NOTE: If the vibration isolation mount has the Nightsun attached, this is a structural approval only. Any electromagnetic interference which may occur when the Nightsun is connected to the rotorcraft electric system has not been evaluated.

Limitations and Conditions (cont'd)

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

a. Limitations for both SX-16 Nightsun and 2000 Series FLIR:

1. The rubber anti-vibration mounts, P/N MIC25-00180, must be checked for condition every annual and/or 100 hour inspection. Replace as necessary.
2. Retractable landing light must be replaced with fixed landing light, MBB P/N 117-86681.
3. Dual pitot sensors must be relocated forward of the isolation mount in accordance with MBB Kit 117-86251.
4. Reduced ground clearance requires a flat or prepared surface for takeoff and landing.

b. Limitation for 2000 Series FLIR:

Antenna from other avionics should not be located nearer than six (6) feet from the Imager/PPS assembly.

c. Limitations for Spectrolab SX-16 Nightsun:

The following placard must be installed within plain view of the pilot when the Spectrolab SX-16 Nightsun is installed on the rotorcraft:

Nightsun must be in the stowed (horizontal) position for takeoff and landing
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